

35 39. The device of claim 38 wherein the authenticity of said document is
2 determined relative to genuine United States currency.

REMARKS

Claims 11, 33, and 51 have been amended, and new claims 52-59 have been added.

A. § 102 REJECTIONS

Claims 1-7, 10, 22-28 and 32 were rejected under § 102 on the basis of Jones [U.S.Pat. No. 4,114,804]. Additionally, it appears that the Examiner also rejected claim 50 on the same ground. The applicant respectfully traverses these rejections and maintains that these claims are not anticipated by Jones.

1. Claims 1 and 22

With respect to claims 1 and 22, the Examiner stated that Jones discloses "means for detecting light reflected by said document and generating an output signal responsive to the reflected light." The applicant respectfully traverses this assertion as a ground for a determination of anticipation under § 102 for at least two reasons: (1) the applicant believes this assertion improperly characterizes the disclosure of Jones and (2) even if Jones were to disclose what is asserted by the Examiner, Jones would still not anticipate these claims since a limitation contained within these claims has been inadvertently overlooked by the Examiner.

First of all, the applicant maintains that Jones does not disclose "means for detecting light reflected by said document and generating an output signal responsive to

the reflected light" as asserted by the Examiner. For the above proposition, the Examiner points to Fig. 1c, it. 73; col. 5, lines 34-42 and col. 6, lines 38-48 of Jones. Rather than disclosing a means for detecting reflected light, sensor 73 of Jones clearly is used to detect emitted fluorescent light. See col. 5, line 34 ("A fluorescence detector element 73") and col. 6, line 35 ("FLUORESCENCE DETECTION"). This is further evident from the fact that the light source that illuminates the document in Jones is an ultraviolet light. See Fig. 1c, it. 71 and col. 5, line 20.

Secondly, claims 1 and 22 require "detecting ultraviolet light reflected" and "an ultraviolet light detector for generating an output signal responsive to ultraviolet light reflected by said document," respectively. In asserting that Jones anticipates claims 1 and 22, the Examiner has inadvertently overlooked the limitation that "ultraviolet" light is being detected. Reviewing sensor 73 of Jones and the text cited with respect thereto, it becomes clear that Jones does not detect ultraviolet light, but rather detects blue light. See Fig. 1c, filter 74 and col. 5, lines 35-36 ("a filter 74 which passes only blue light") and col. 6, lines 44-46 ("dark blue filter 74 is positioned in front of the element 73 to pass light of the order of 4500 Angstroms, while blocking the passage to light of other wavelengths").

Accordingly, rather than anticipating claims 1 and 22, Jones merely provides an example of a prior art fluorescent detecting device. See the background of the specification of the present application at page 2, lines 9-15 ("It has been known that the illumination of certain substances with ultraviolet light causes the substances to fluoresce, that is, to emit visible light.... Previous methods have been developed to authenticate such documents by sensing the fluorescent light emitted by a document illuminated by ultraviolet light").

Accordingly, the applicant maintains that claims 1 and 22 are clearly allowable over Jones.

2. Claims 2-5 and 23-26

With respect to claims 2-5 and 23-26, the Examiner points to col. 6, lines 38-48 of Jones as providing disclosure that anticipates these claims. This part of the specification of Jones appears to describe the fluorescent detector 73 as having two states, a high impedance state and a low impedance state depending on whether fluorescent light is absent or present.

The assertion that this disclosure anticipates claims 2-5 and 23-26 is respectfully traversed. Claims 2-5 and 23-26 all relate to the detection of "ultraviolet light reflected" from a document. This feature is clearly not taught by Jones. Furthermore, with respect to claims 3 and 24, the cited passage of Jones contains no teaching with respect to the detection of "a pattern of ultraviolet light reflected." With respect to claims 4-5 and 25-26, the cited passage of Jones contains no teaching with respect to the detection of "the amount of ultraviolet light reflected from one or more areas of said document."

Accordingly, the applicant maintains that claims 2-5 and 23-26 are clearly allowable over Jones.

3. Claims 6 and 27

With respect to claims 6 and 27, the Examiner points to col. 6, lines 15-25 of Jones as providing disclosure that anticipates these claims. In this regard, the Examiner states that this part of the disclosure of Jones teaches that "the document is United States currency."

The assertion that this disclosure anticipates claims 6 and 27 is respectfully traversed for at least two reasons. First of all, there is no teaching with respect to the detection of "ultraviolet light reflected". Secondly, there is nothing teaching the authentication test recited in these claims, namely, "wherein a negative determination of authenticity is made regarding said document if a relatively high amount of ultraviolet light is not reflected from said document;" a limitation that the Examiner has inadvertently overlooked.

Accordingly, the applicant maintains that claims 6 and 27 are clearly allowable over Jones.

4. Claims 7 and 28

With respect to claims 7 and 28, the Examiner points to col. 5, lines 34-42 of Jones as providing disclosure that anticipates these claims. In this regard, the Examiner states that this part of the disclosure of Jones teaches use of "filter 74 for filtering the reflected light."

The assertion that this disclosure anticipates claims 7 and 28 is respectfully traversed. The applicant agrees with the Examiner that this part of the specification teaches using a filter to filter light. However, this part of the specification clearly teaches using a blue filter to screen out all light except blue light. See col. 5, line 35-42 ("a filter 74 which passes only blue light..."). In this regard, the Examiner has apparently overlooked the limitation of claims 7 and 28 relating to the use of an "ultraviolet" filter.

Accordingly, the applicant maintains that claims 7 and 28 are clearly allowable over Jones.

5. Claims 10 and 32

With respect to claims 10 and 32, the Examiner points to col. 5, lines 34-42 of Jones as providing disclosure that anticipates these claims. In this regard, the Examiner states that this part of the disclosure of Jones teaches that "the pass band of the filter is quite narrow, thus the filter is not sensitive to light having wavelength much longer than 450 nm which meets the claim limitation."

The assertion that this disclosure anticipates claims 10 and 32 is respectfully traversed. The applicant agrees with the Examiner that this part of the specification teaches using a filter with a narrow pass band about 450 nm and that the disclosed filter would not pass light having a wavelength "much longer than 450 nm." By the same token, it is clear that the disclosed filter is designed not to pass light having a wavelength much less than 450 nm. That being said, it is clear that this passage does not teach what is being claimed in claims 10 and 32, namely, the use of "a detector which is not sensitive to light having a wavelength longer than 400 nm."

Accordingly, the applicant maintains that claims 10 and 32 are clearly allowable over Jones.

6. Claim 50

With respect to claim 50, the Examiner points to col. 5, lines 3-17 of Jones as providing disclosure that anticipates this claim. In this regard, the Examiner states that this part of the disclosure of Jones teaches "means for selectively activating the device."

The assertion that this disclosure anticipates claim 50 is respectfully traversed. The applicant maintains that claim 50 is clearly allowable over Jones at least for the reasons set forth with respect to claims 1 and 22.

B. § 103 REJECTIONS

Claims 8, 9, and 29-31 were rejected under § 103 on the basis of Jones and Cooper [U.S. Pat. No. 3,618,765]. In this regard the Examiner, states that "Jones et al discloses the claimed invention except for the filter which filters out light having wavelength longer than 400 nm." The Examiner then points to Cooper as teaching the use of a filter that filters out light having wavelength longer than 400 nm.

The applicant respectfully traverses the rejection of claims 8, 9, and 29-31 based on Jones and Cooper. Cooper essentially discloses an authenticating system similar to Jones except that in Cooper the detector is a human eye while in Jones an electronic detector is provided. In both, a document is illuminated with ultraviolet light, and it is determined whether blue light is emitted. As discussed above, in Jones it is abundantly clear that only blue light is being detected and not ultraviolet light as is evidenced by the presence of the blue filter 74 between the document and the detector 73. Likewise, in Cooper, a blue filter 18 and 18' is positioned between the document and the detector, namely, the eye of the person operating the device of Cooper. That ultraviolet light is not being detected in Cooper is additionally abundantly clear since the detector in the Cooper device, namely a human eye, can not detect ultraviolet light (that is, ultraviolet light is not visible to the human eye).

The portion of the specification in Cooper referred to by the Examiner is directed to providing an ultraviolet light source. An ultraviolet filter is provided about the ultraviolet light source 16 to ensure that the light source only provides ultraviolet light. See Cooper col. 2, lines 39-41. Significantly, the ultraviolet filter described in Cooper is not used in the detecting step. If it were, the operator of the Cooper device would not be able to detect anything since the human eye can not detect ultraviolet light.

Accordingly, there is no teaching or suggestion in Jones or Cooper or the combination of Jones and Cooper for the inventions of claims 8, 9, and 29-31 at least for the reason that there is no teaching or suggestion of, for example, the limitation of claim 8 that "said detecting step further comprises the step of filtering out light having a wavelength longer than 400 nm" and the limitation of claim 29 that "light from said bill passes through said first filter before striking said photodetector; said first filter filtering out light having a wavelength longer than 400 nm." Thus the applicant maintains that claims 8, 9, and 29-31 are allowable over Jones and Cooper.

C. CLAIMS INDICATED AS ALLOWABLE

Claims 11-21, 33-49 and 51 were objected to as being dependent upon rejected claims but would be allowable if rewritten in independent form. In this regard, claims 12-21 are dependent upon claim 11 and claims 34-49 are dependent upon claim 33. Accordingly, claims 11, 33 and 51 have been amended to recast them in independent form. Accordingly, claims 11-21, 33-49, and 51 are allowable.

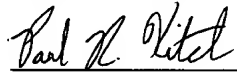
D. NEW CLAIMS

New claims 52-59 have been added. These claims are dependent upon claims addressed above. Accordingly, new claims 52-59 are allowable at least for the reasons discussed above in connection with the claims from which they depend.

In view of the above amendments and remarks, the pending claims are believed to be in allowable form and favorable reconsideration of this application is respectfully requested.

A check for \$410.00 is enclosed for the amended and additional claims. The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 01-2508, Order No. CUMM:115.

Respectfully submitted,



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